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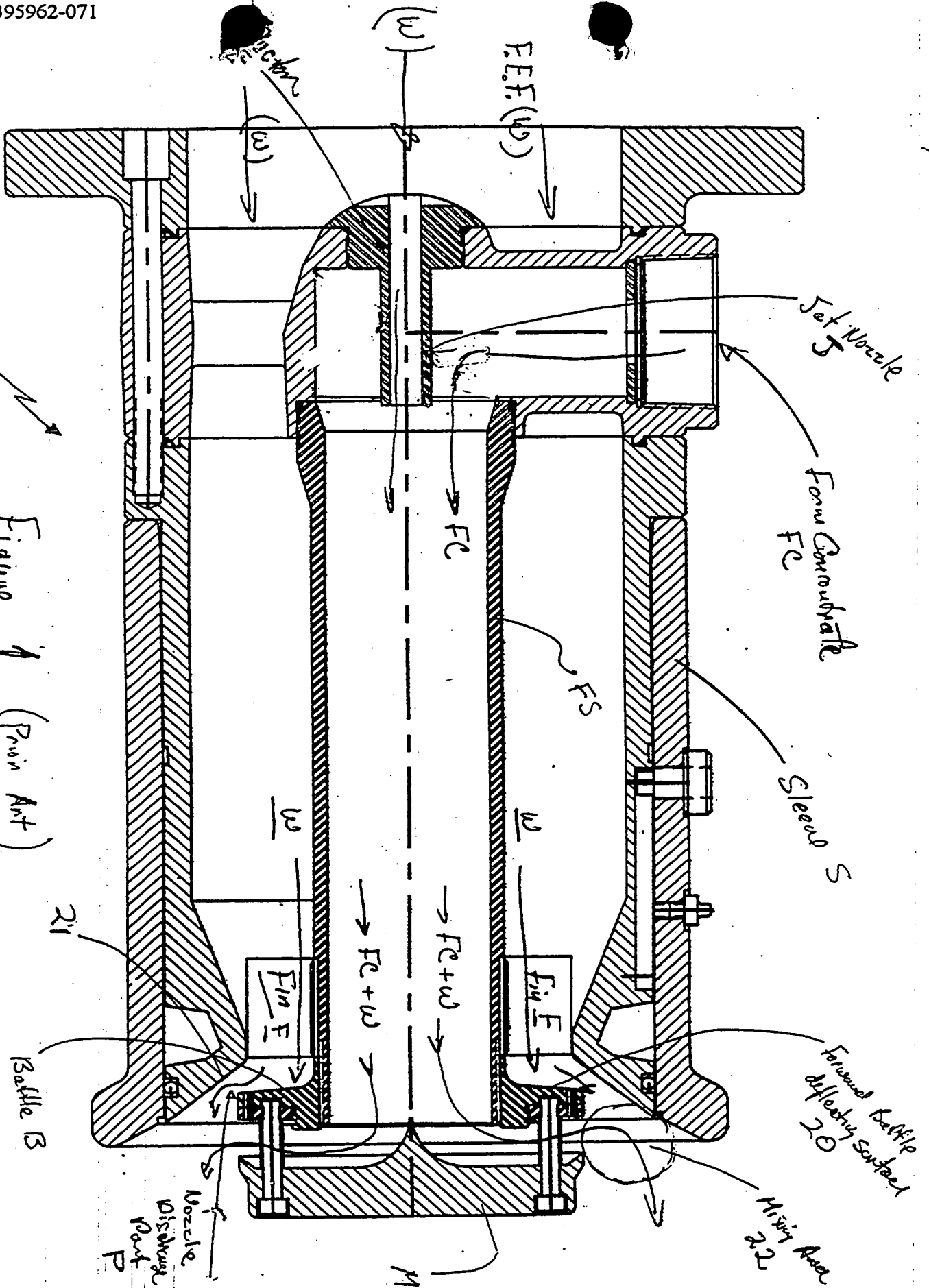
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Nozzle N

Figure 1 (Prior Art)

Self Educating, Not Salt Adjusting

FIG. 1

21

Baffle B

Nozzle Discharge Port P

Jet Nozzle

Form Conduit  
FC

Sleeve S

Forward Baffle  
Deflecting Surface  
20

Mixing Area  
22

(b)

E.F.F.(w)

FC

FS

w

FC+w

w

M

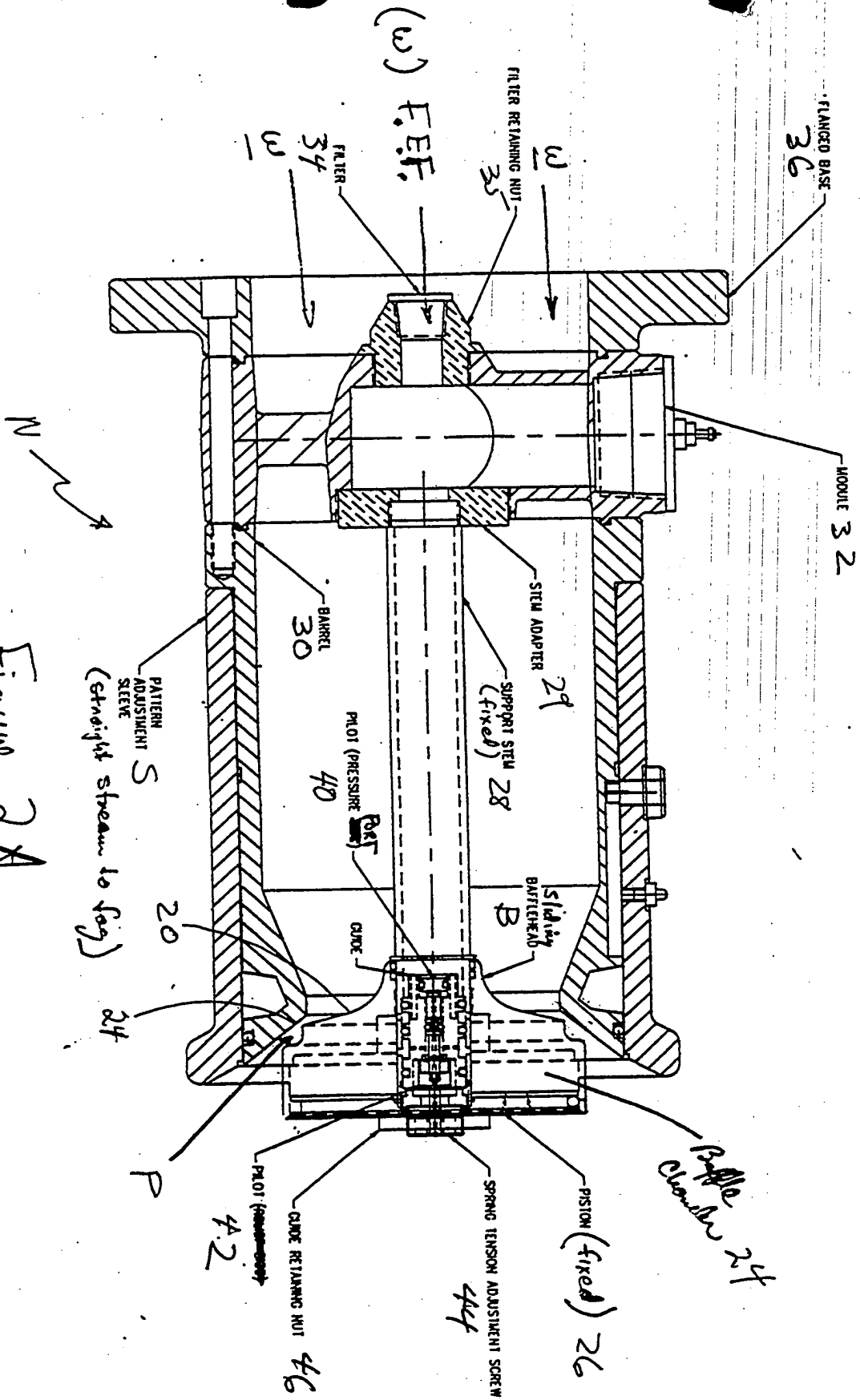
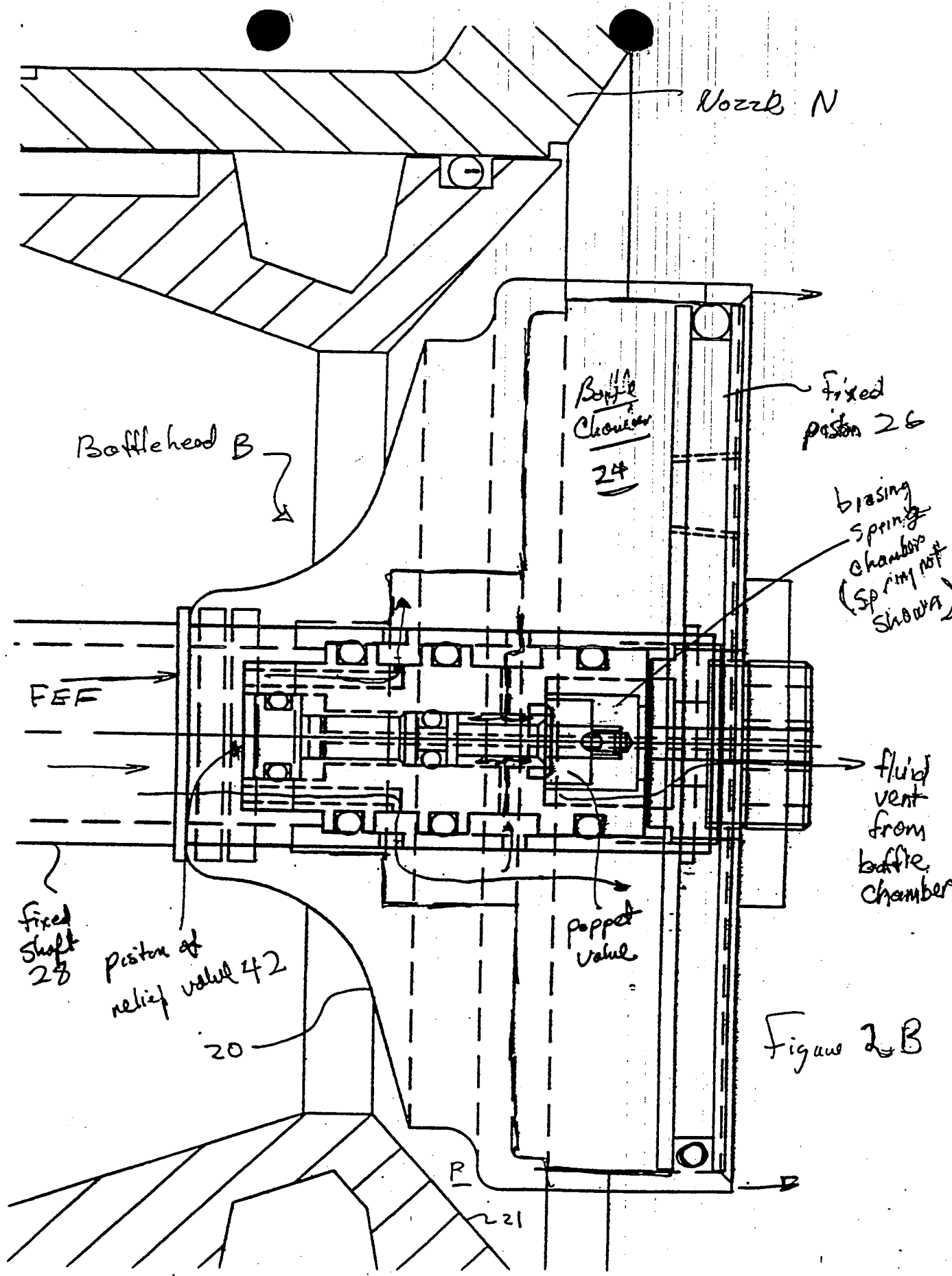


Figure 2A

Soft Adjusting Nozzle

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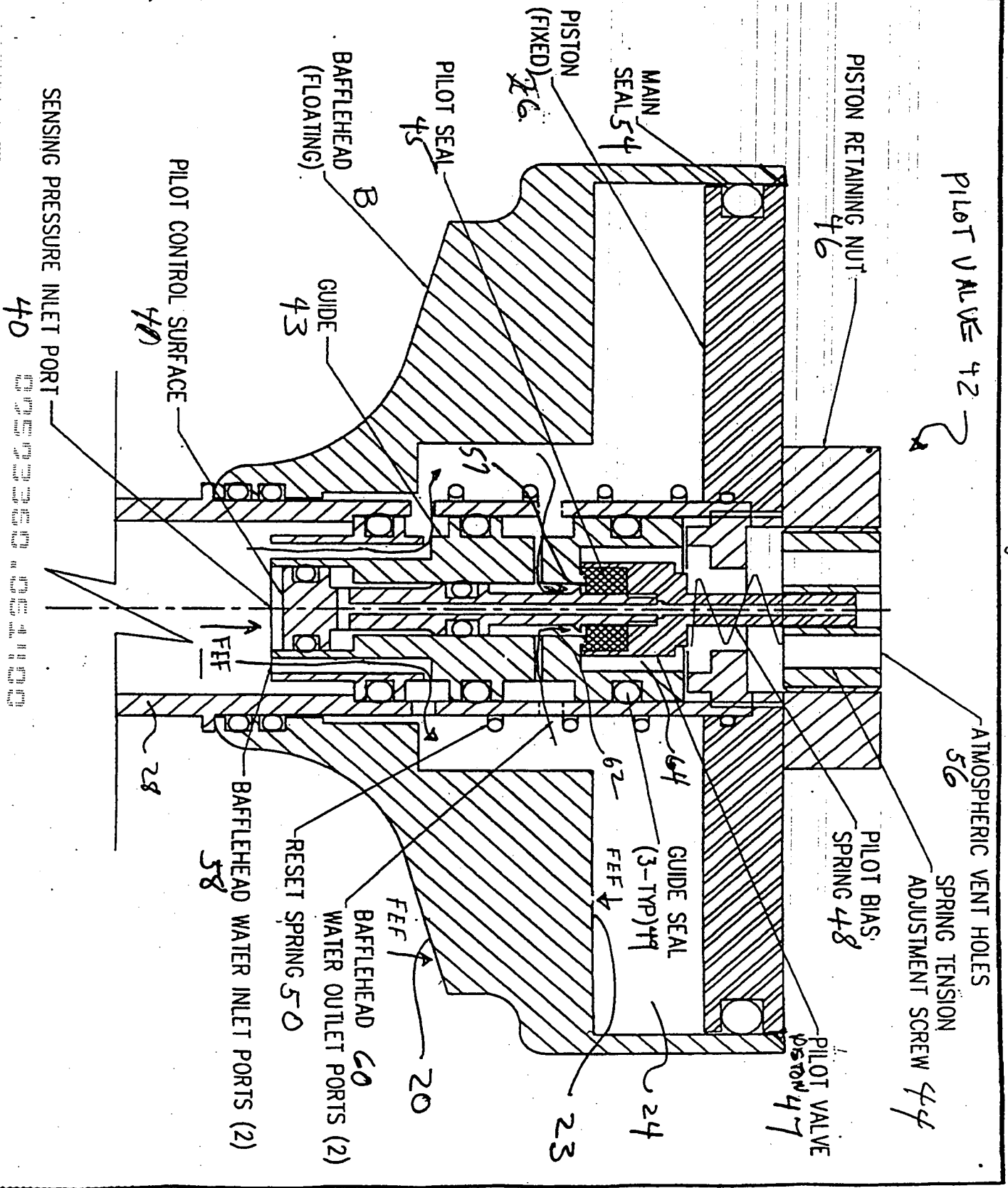


Fig 2C

36  
FLUIDED BLAST

AUTOMATIC NOZZLE  
WATER ONLY

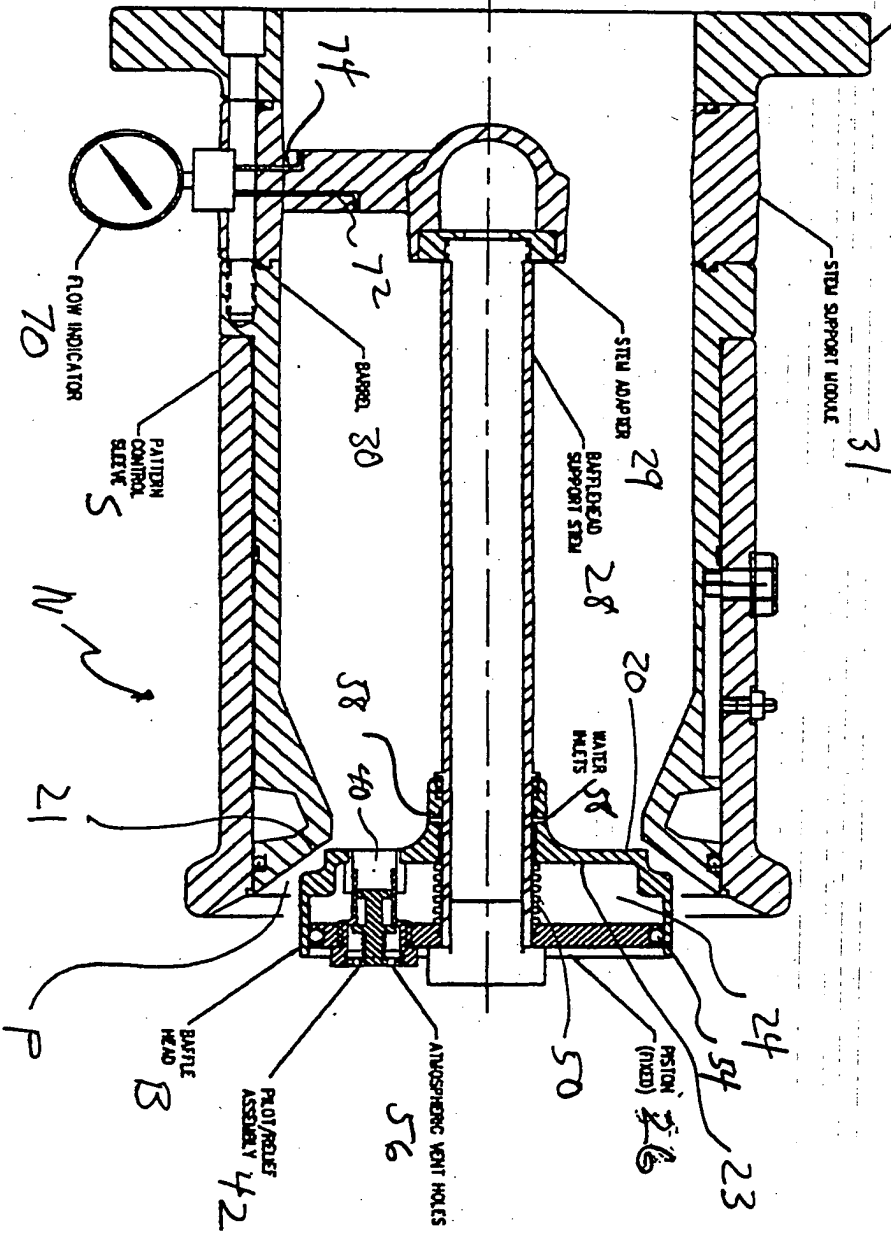
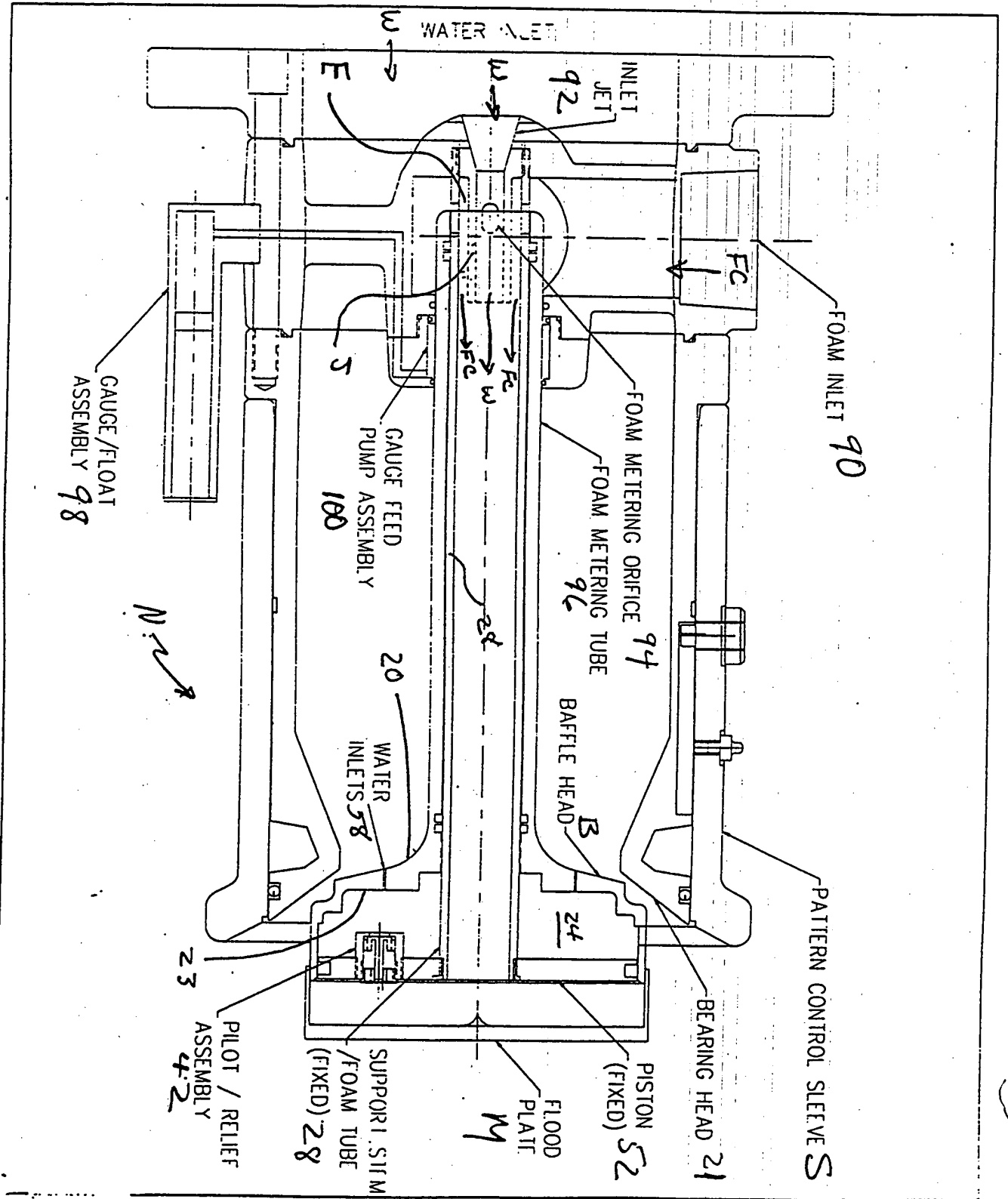


Fig 2D



**PREFERRED DESIGN**

Figure 3A

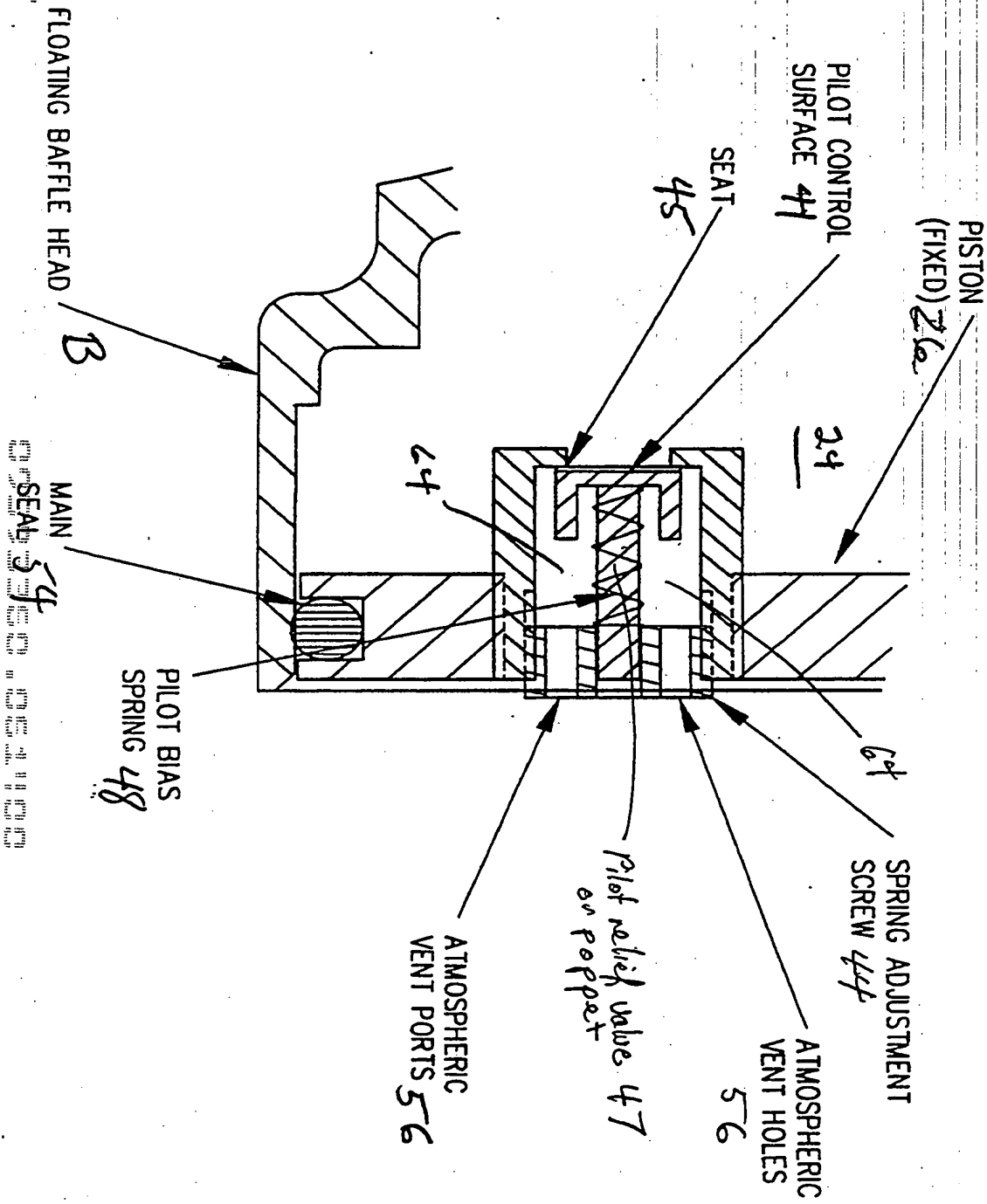
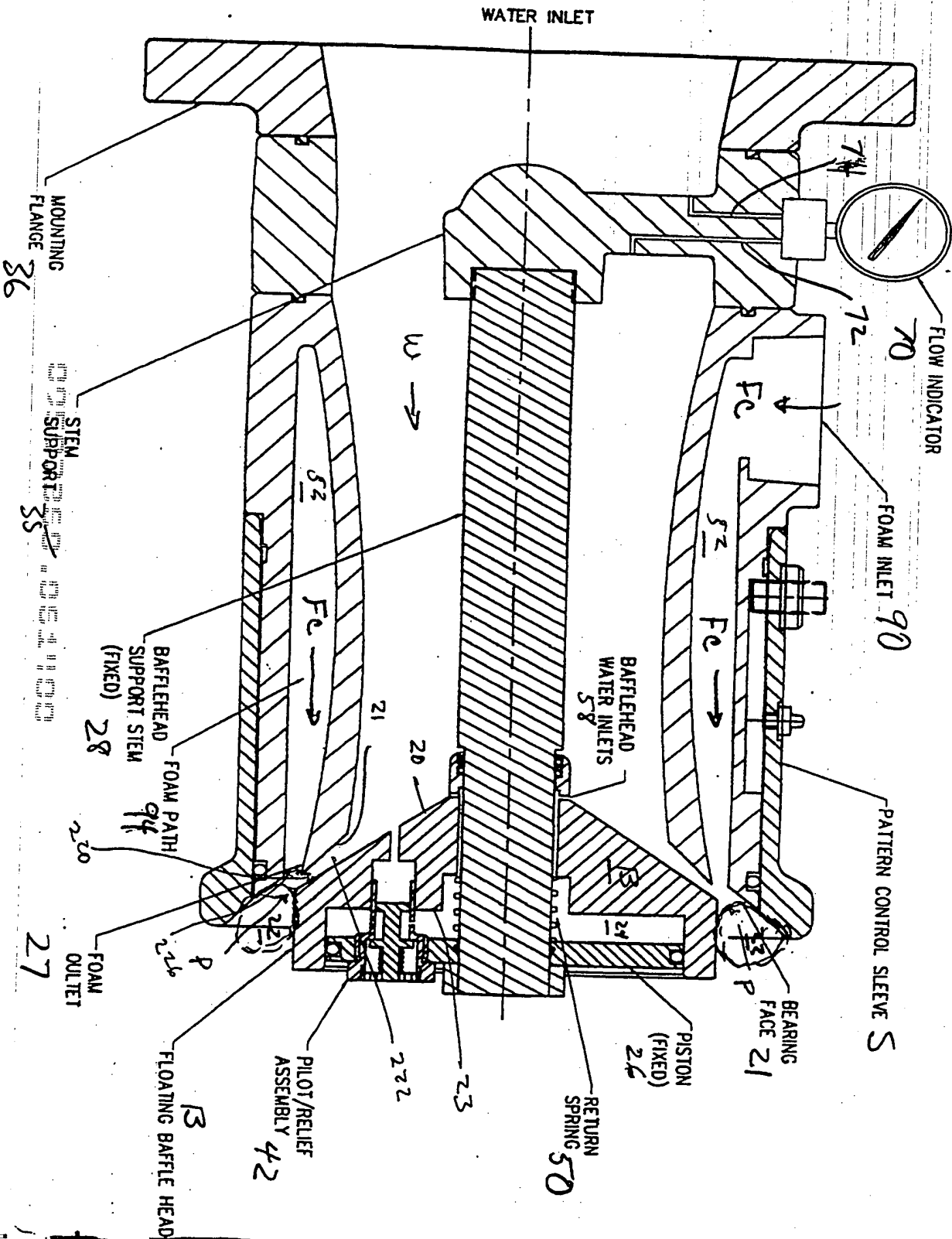


Fig 3B



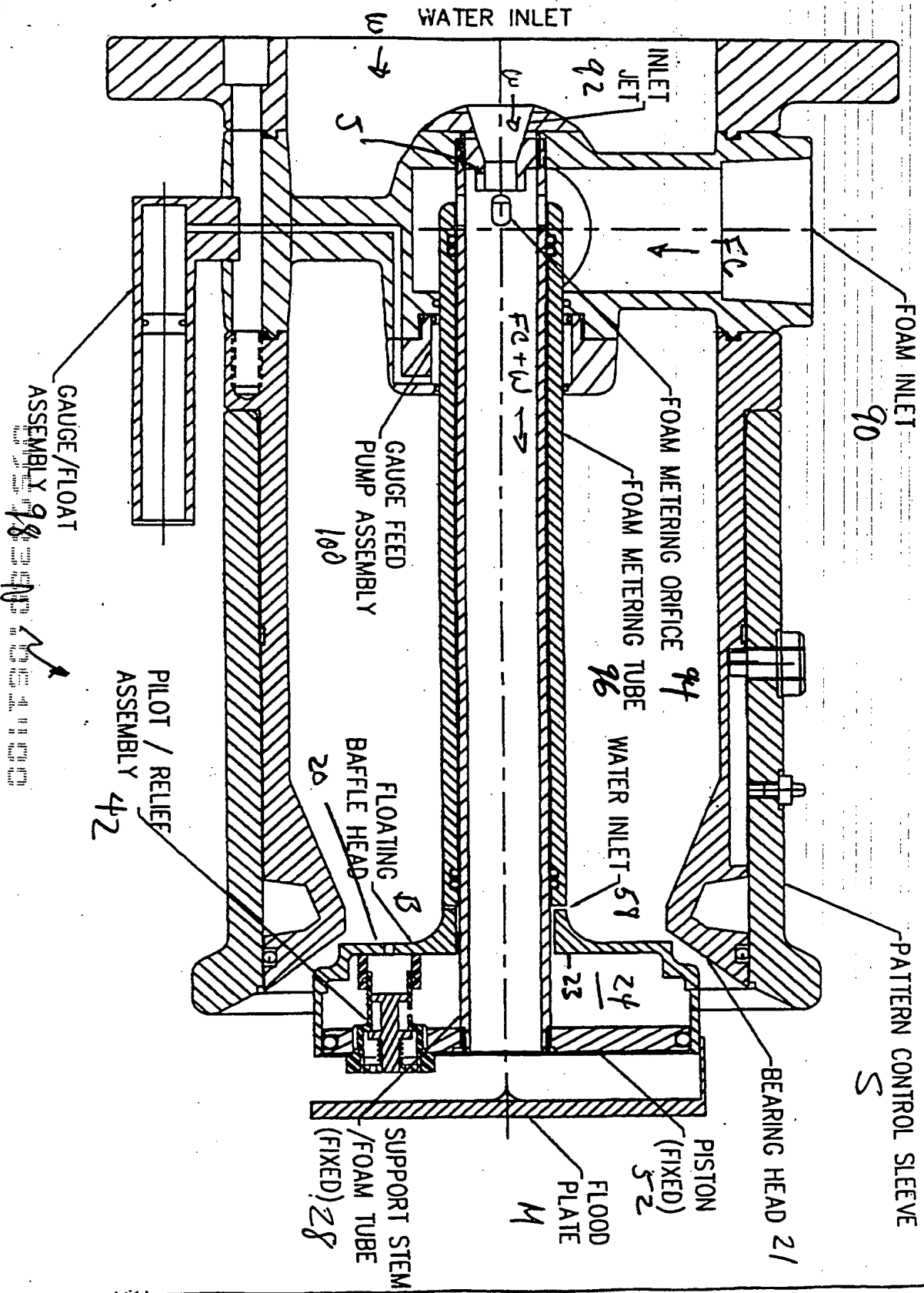


AUTOMATIC NOZZLE  
FOAM ONLY  
PERIPHERAL DISCHARGE

Fig 3c

Fig 3 D

AUTOMATIC NOZZLE  
FOAM ONLY  
CENTRAL DISCHARGE



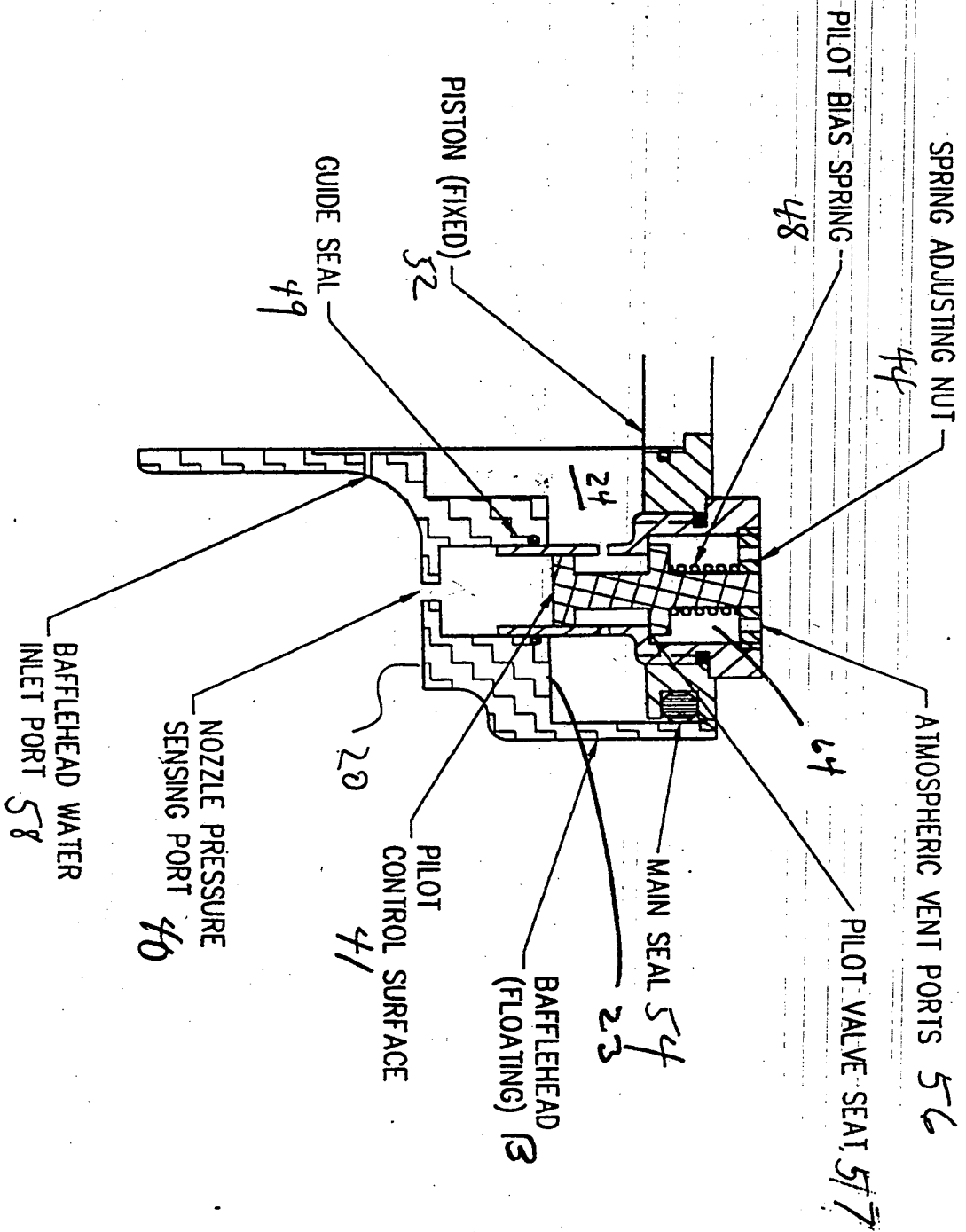


Fig. 3E

FIG. 3E

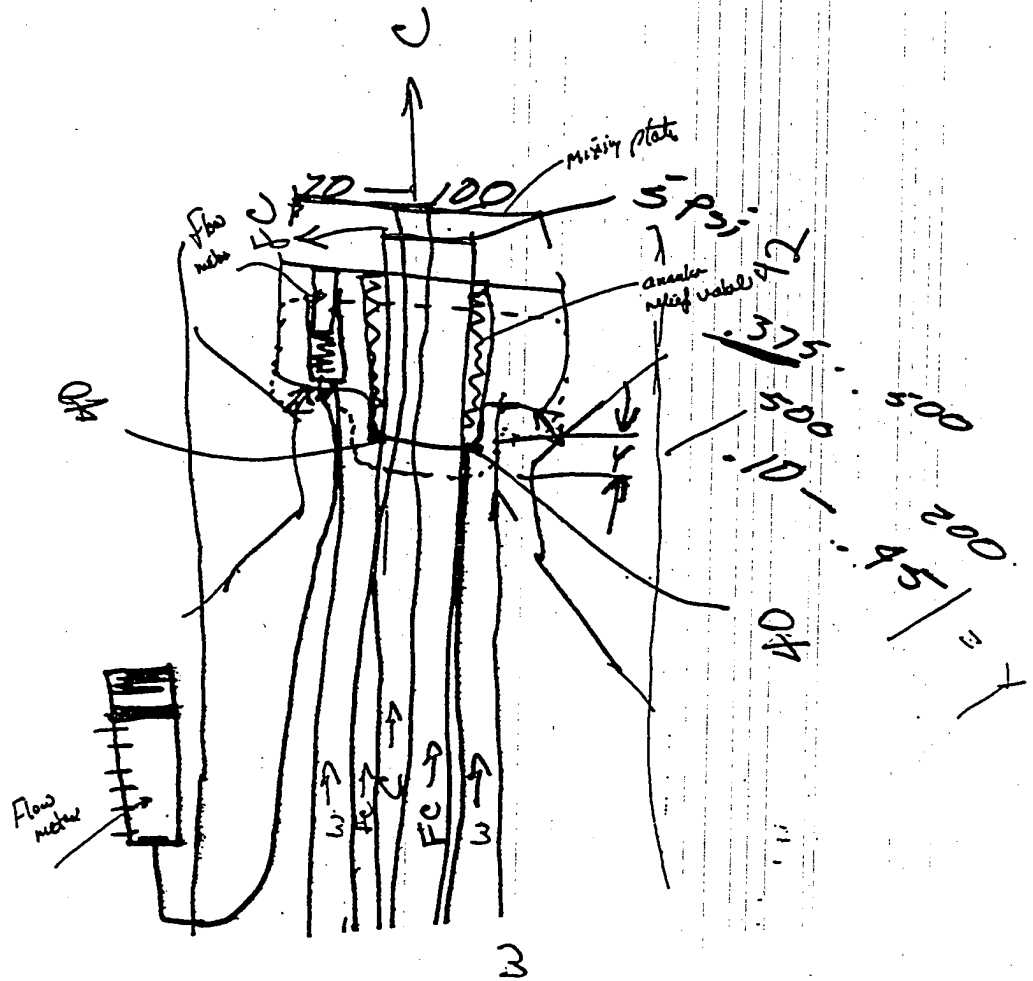


Figure 4A

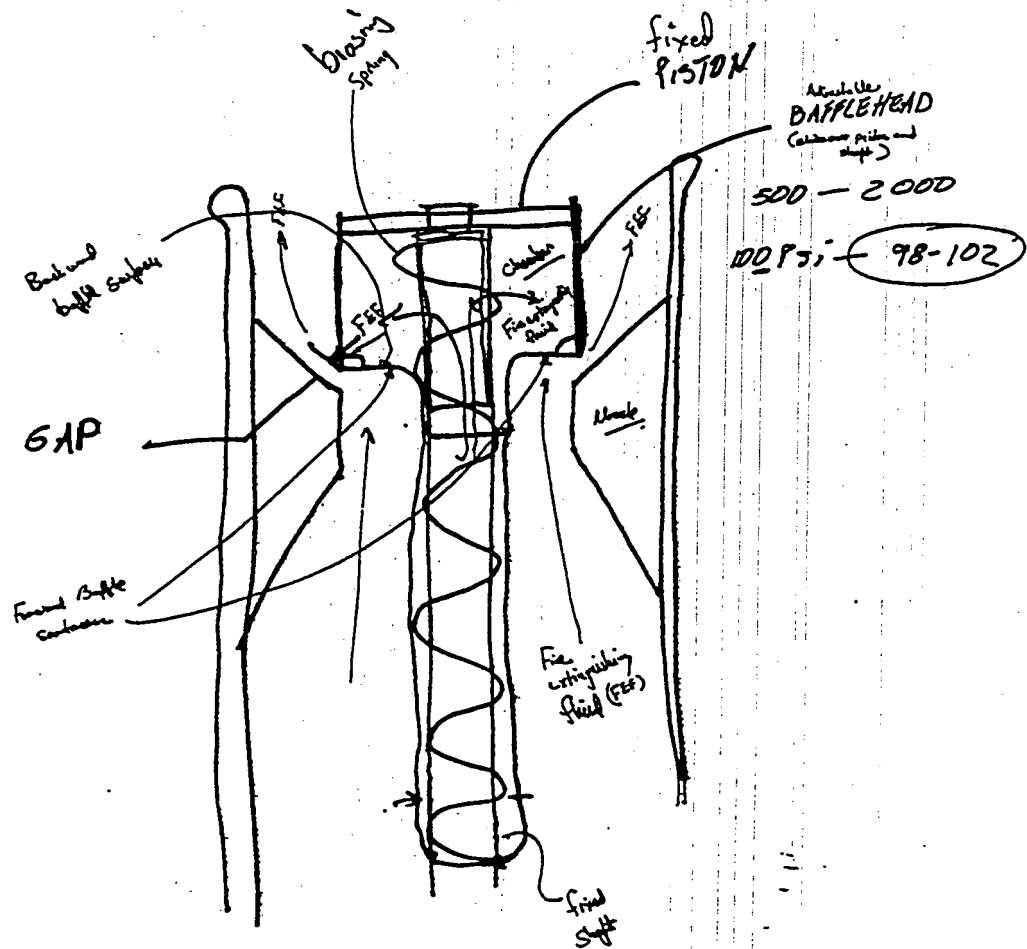


Figure 4B

Fig 4c

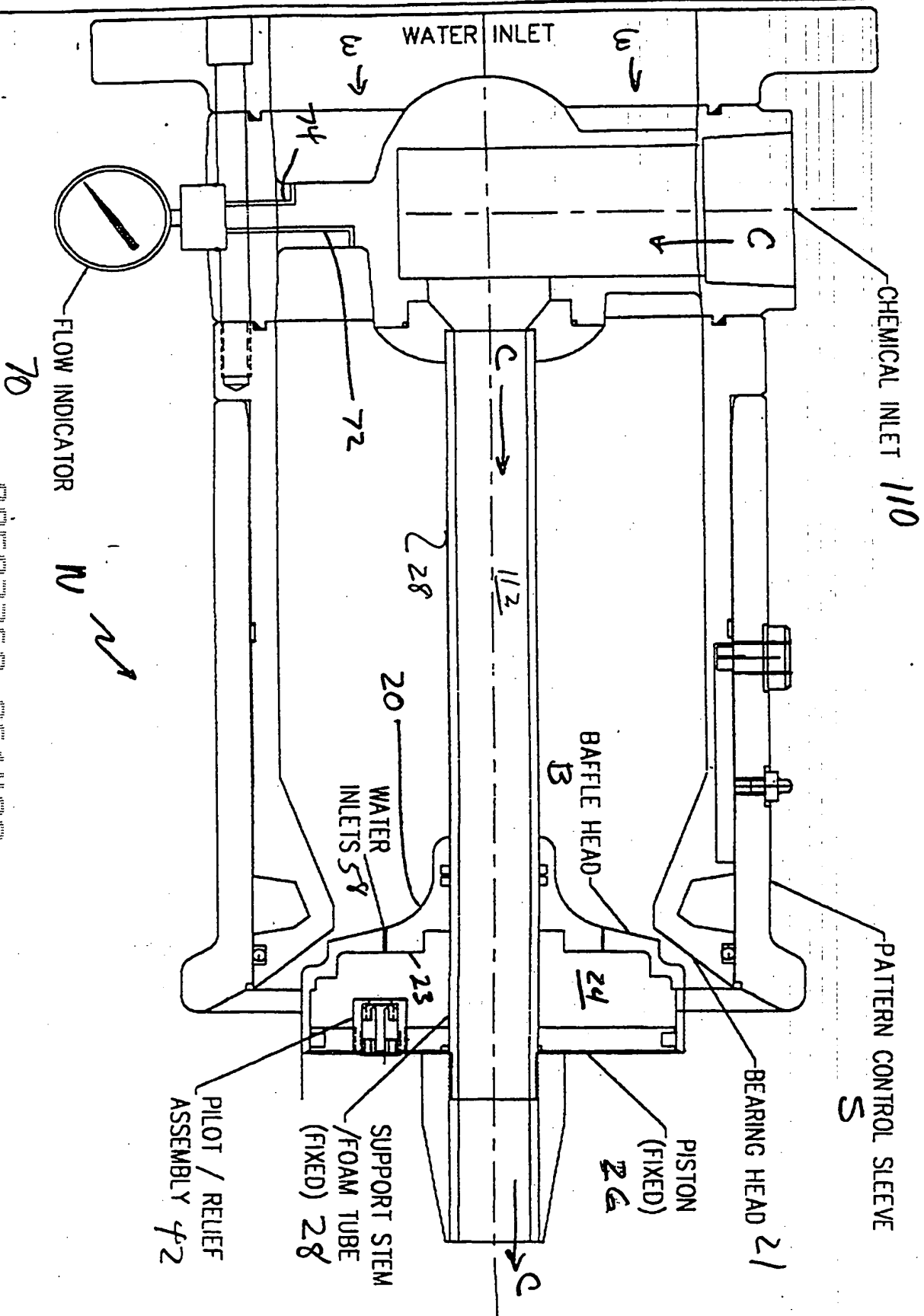
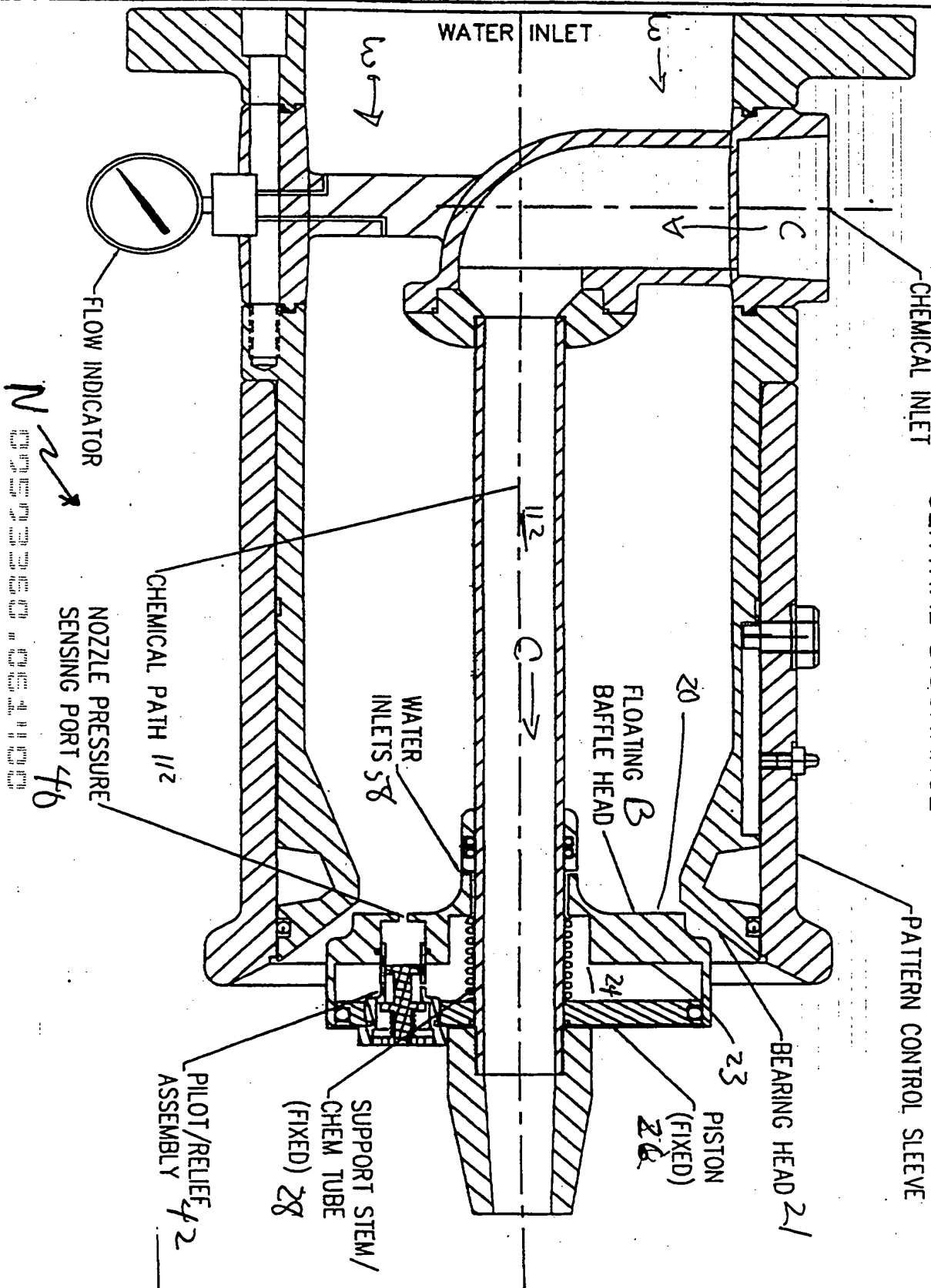


FIG. 4C

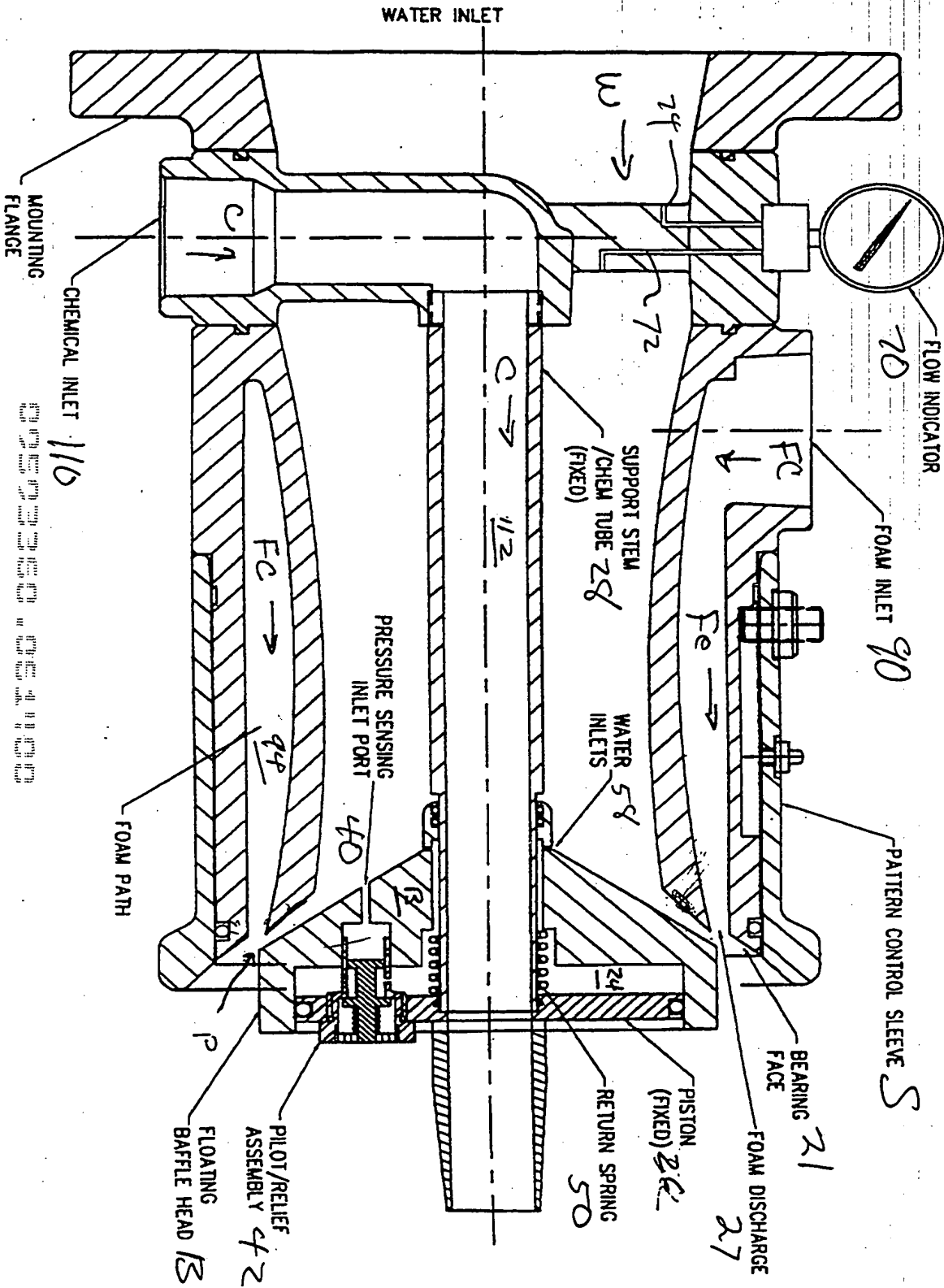
Fig 4 D

AUTOMATIC NOZZLE  
DRY CHEM ONLY  
CENTRAL DISCHARGE



AUTOMATIC NOZZLE  
FOAM PERIPHERAL  
DRY CHEMICAL CENTRAL

Fig. 5A





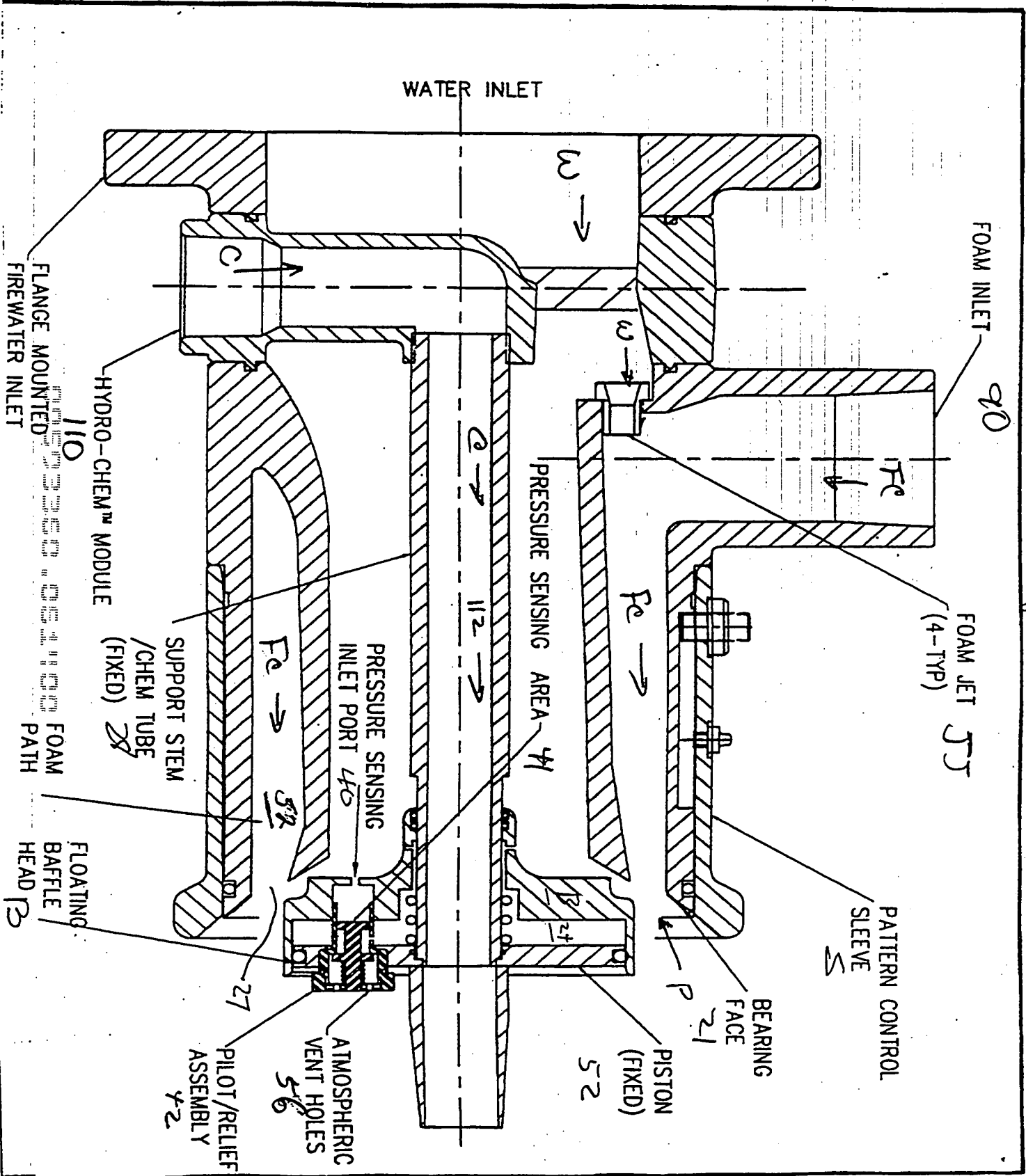


Fig 5.1B

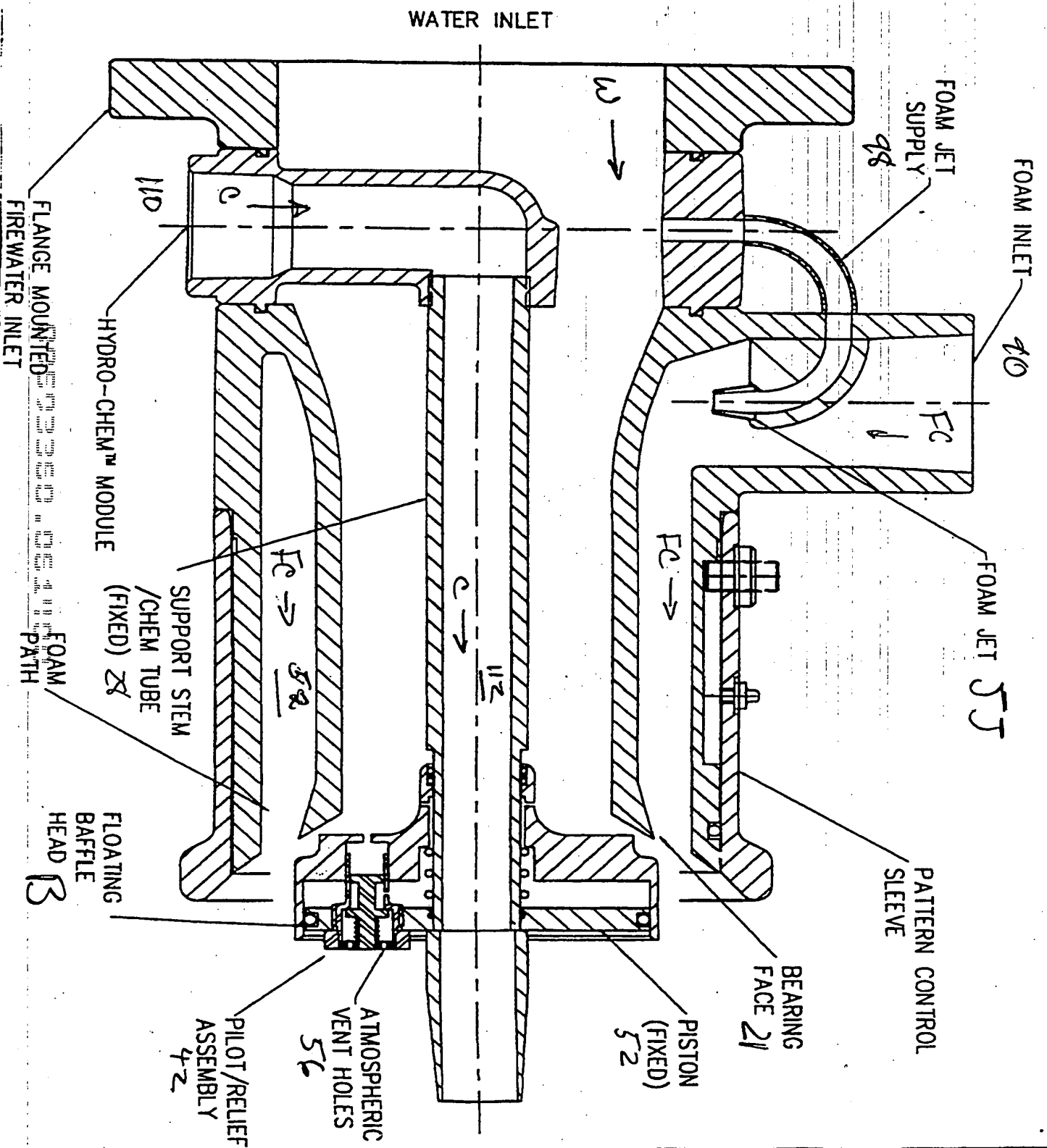
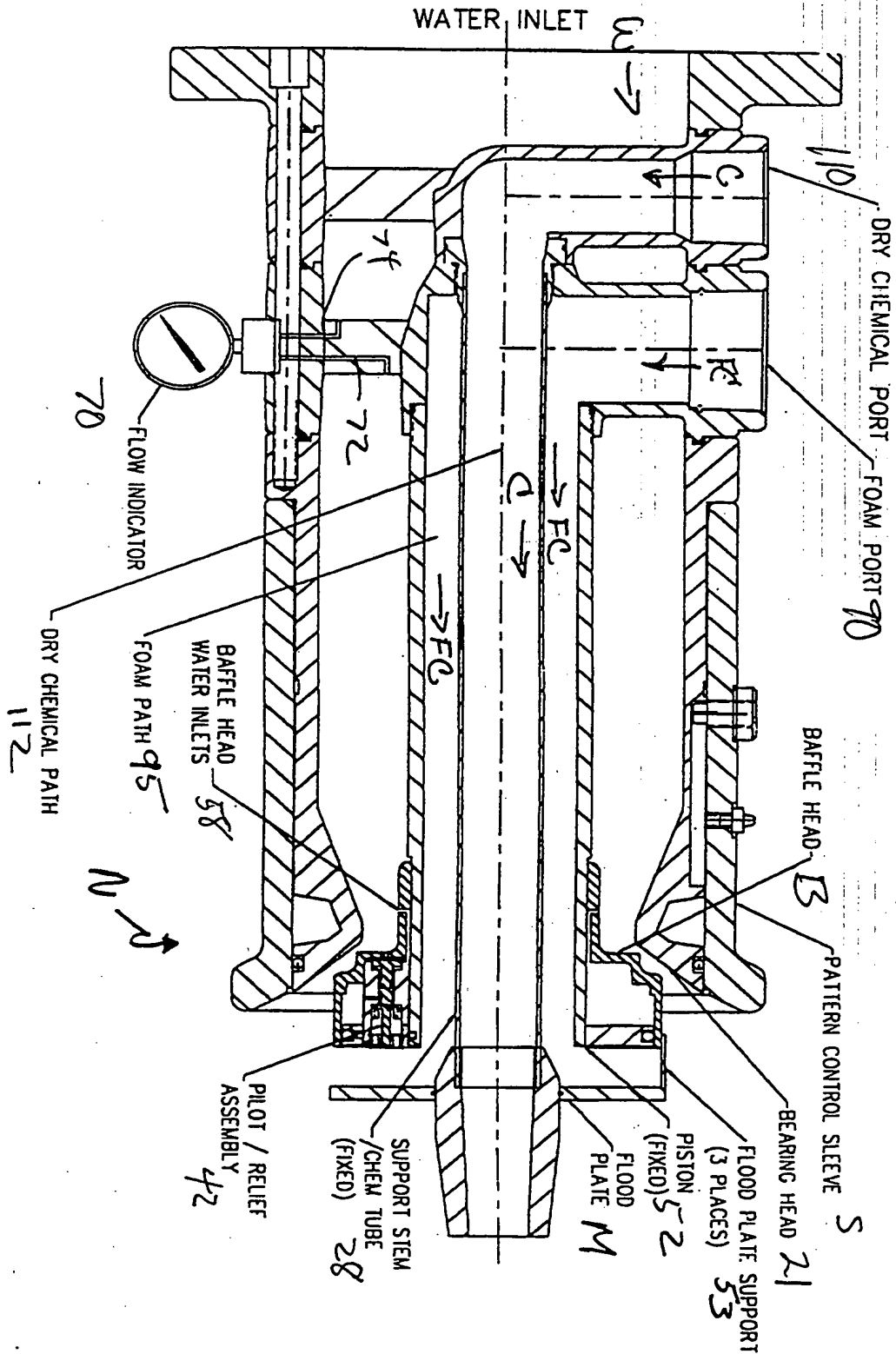


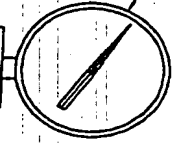
Fig 5c



AUTOMATIC NOZZLE  
FOAM & DRY CHEMICAL  
CENTRAL DISCHARGE

Fig 6

FLOW INDICATOR



FOAM JET  
(1/8" - 1/4")  
290

FOAM INLET  
90

PATTERN CONTROL SLEEVE  
S

BEARING  
FACE  
21

PISTON  
(FIXED)  
26

RETURN  
SPRING  
50

WATER INLET

BAFFLEHEAD  
WATER INLETS  
68

290

BAFFLEHEAD  
SUPPORT STEM  
(FIXED)  
28

FOAM PATH  
52

FOAM  
OUTLET  
27

FLOATING BAFFLE HEAD  
8

PILOT/RELIEF  
ASSEMBLY  
42

MOUNTING  
FLANGE  
36

STEM  
35

AUTOMATIC NOZZLE  
FOAM ONLY  
ENHANCED PERIPHERAL  
DISCHARGE

Fig. 7

FIXED GALLONAGE NOZZLE  
 FOAM ONLY  
 ENHANCED PERIPHERAL  
 DISCHARGE

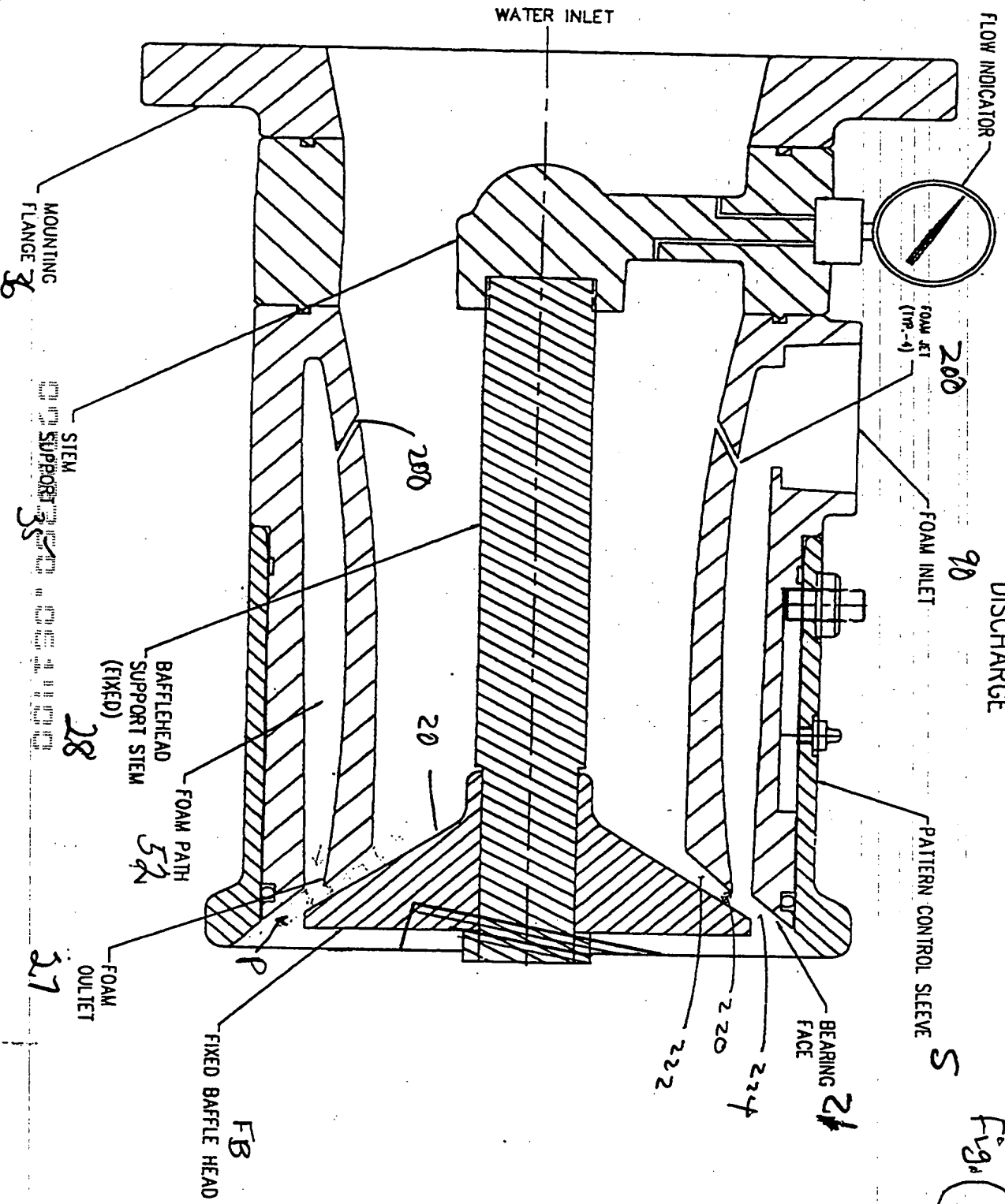


Fig. 8

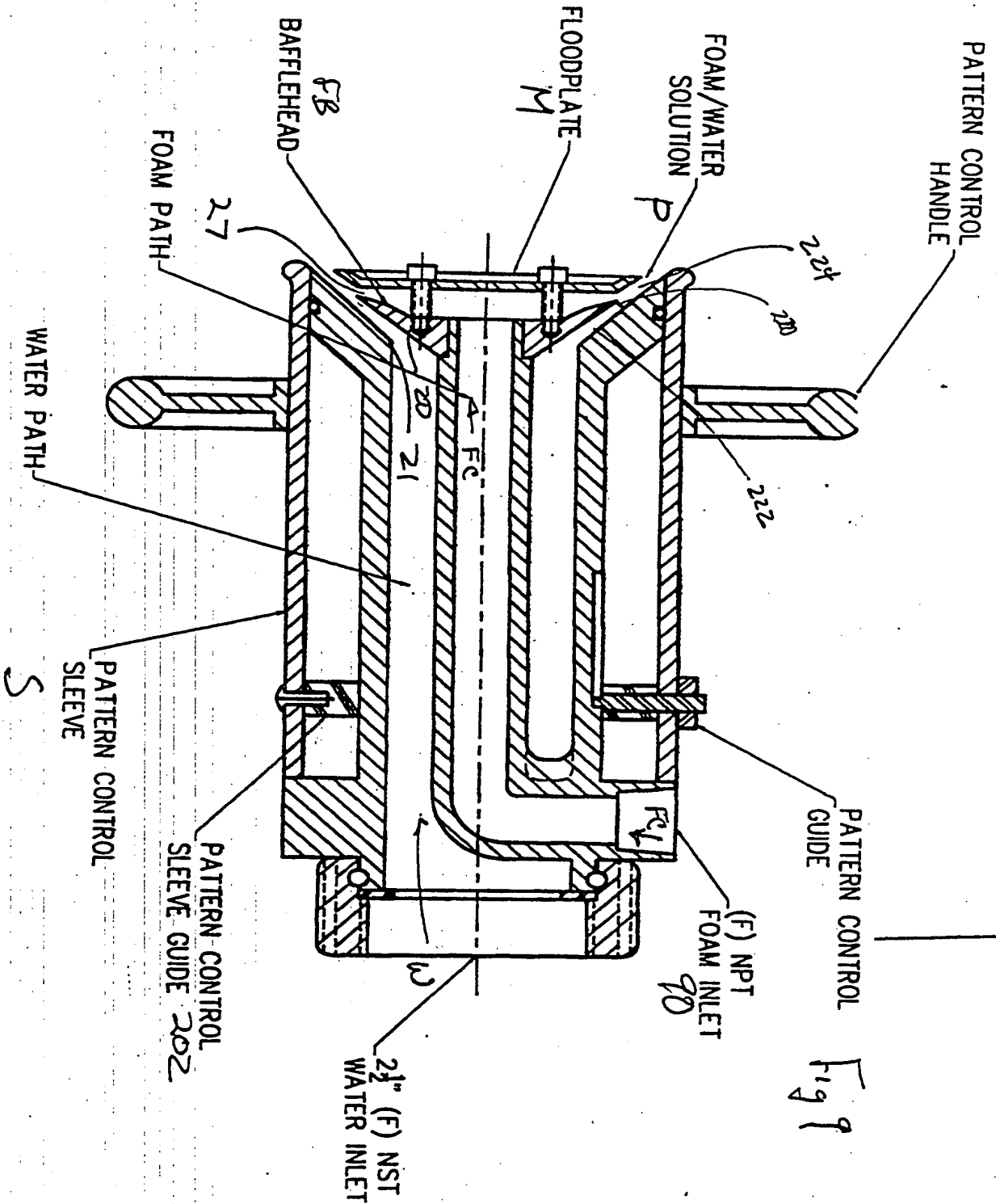


Fig 9

FIG. 9

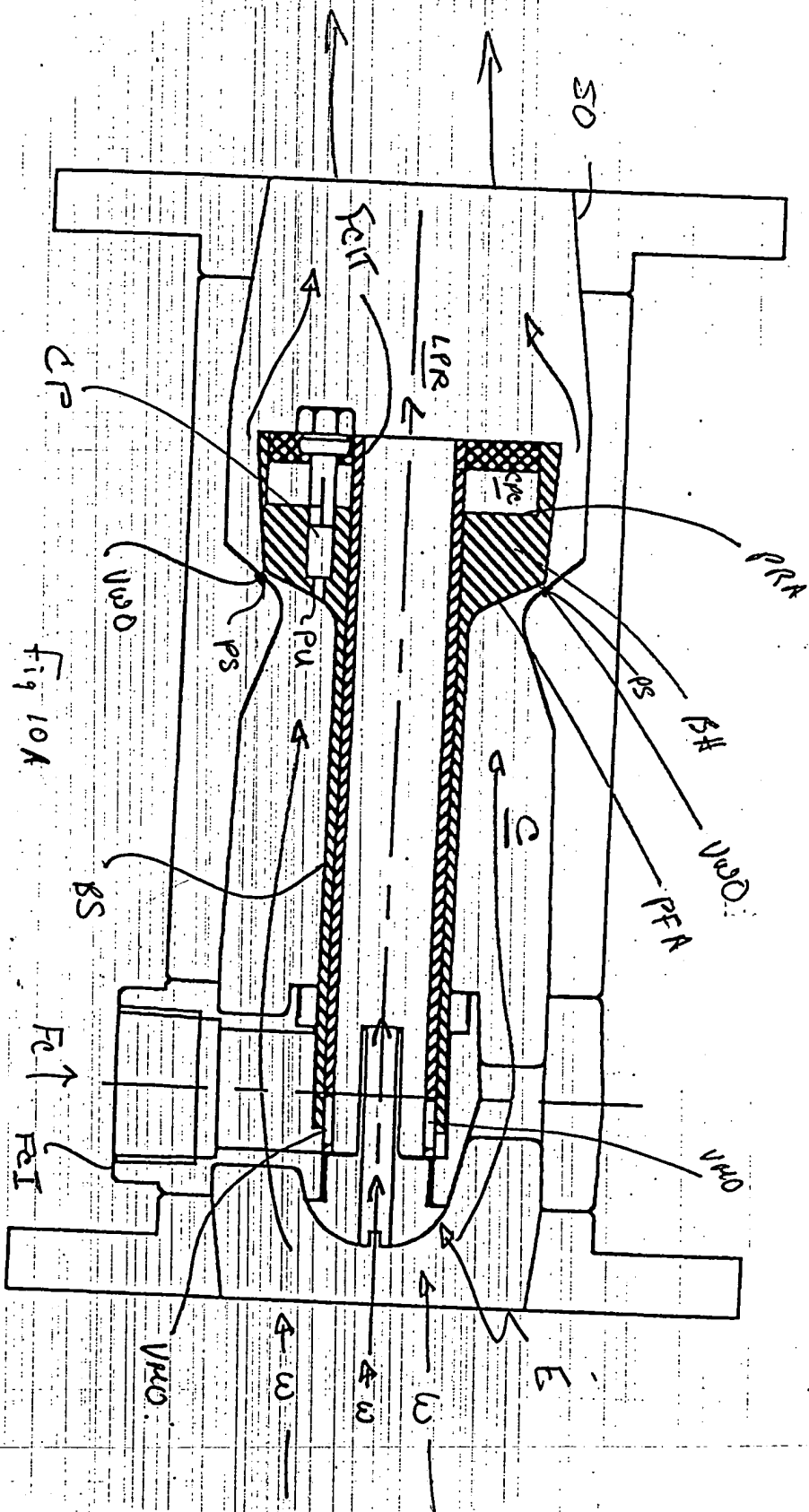


Fig 10A

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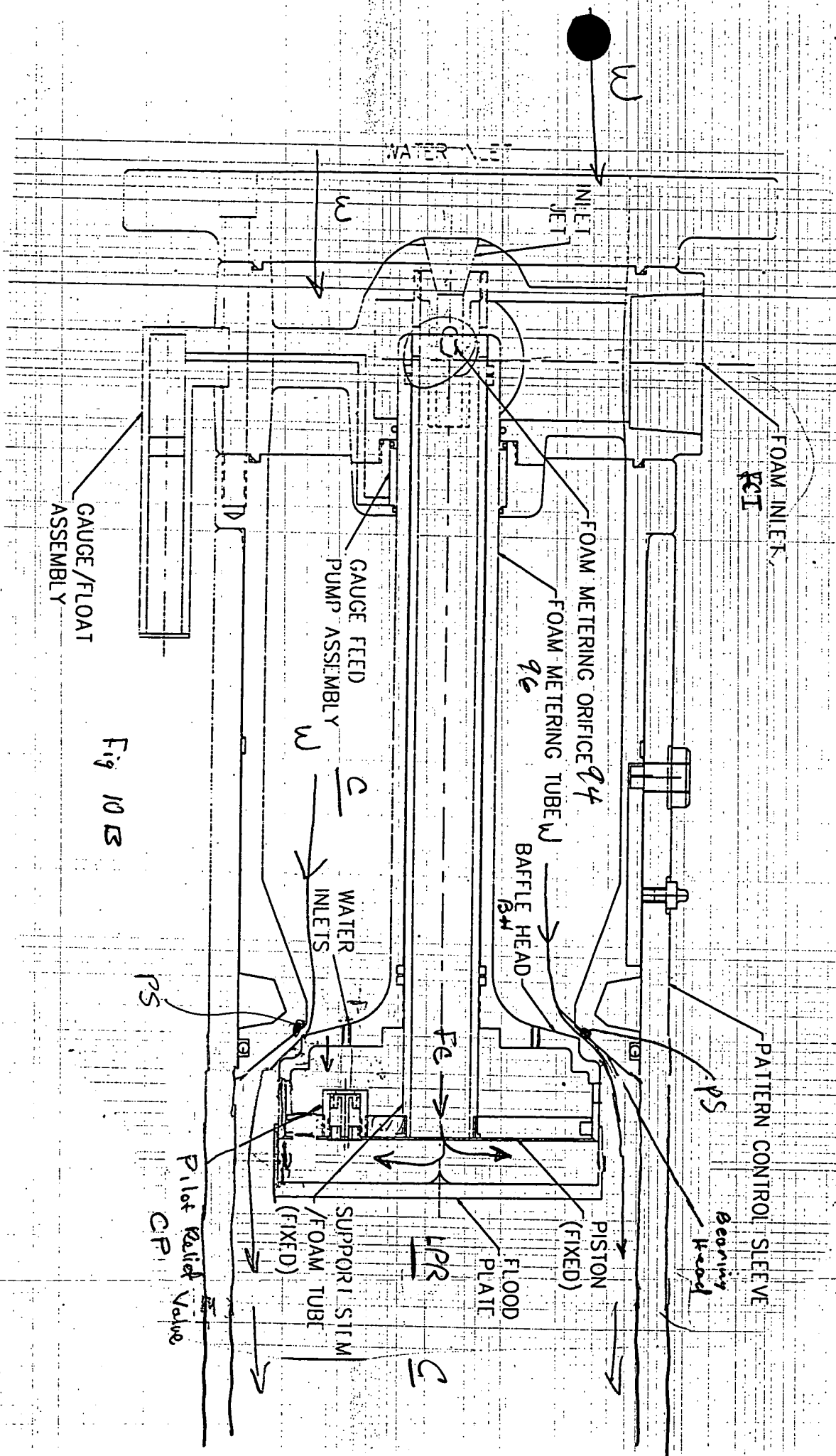


Fig 10 B

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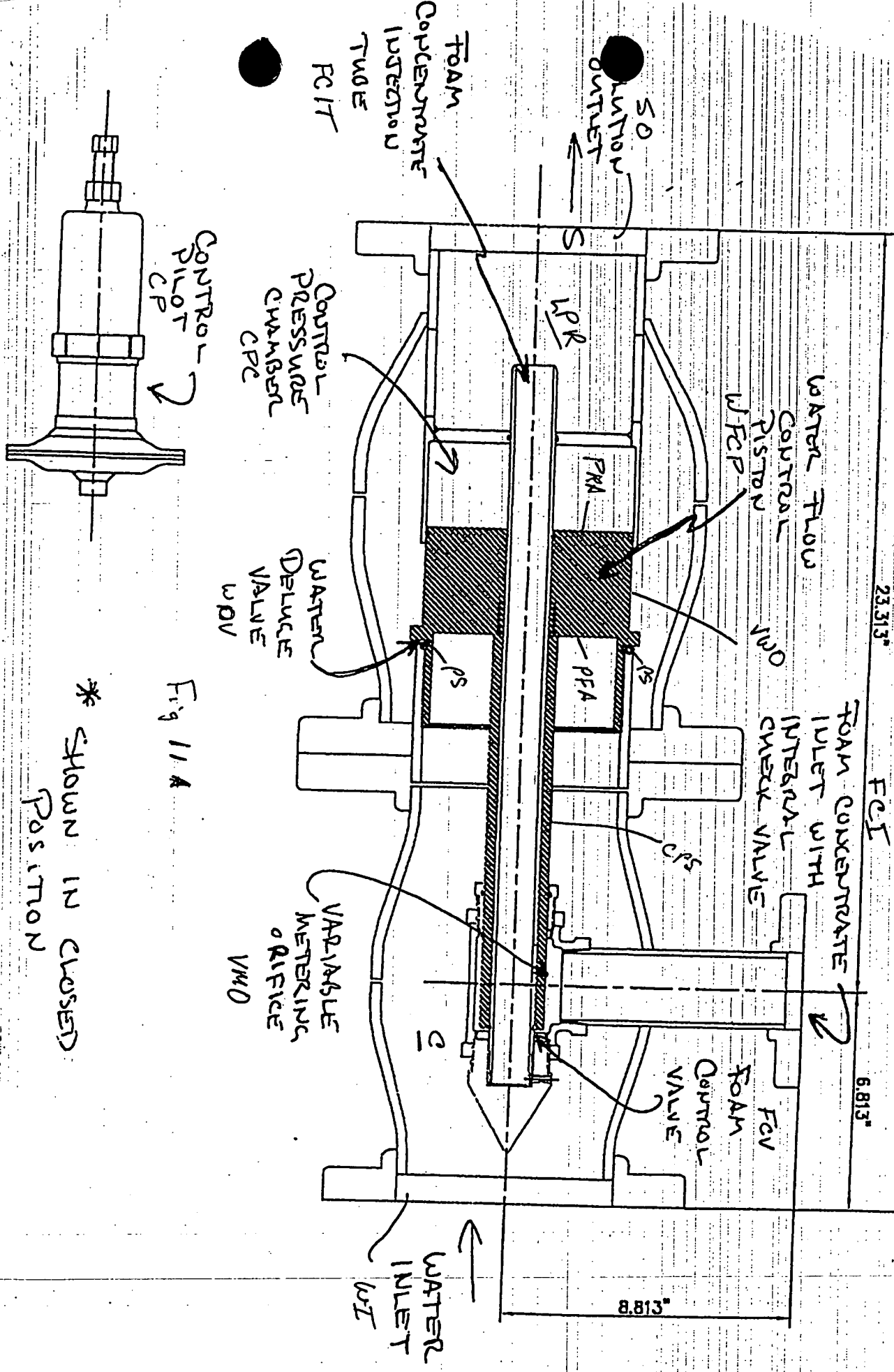
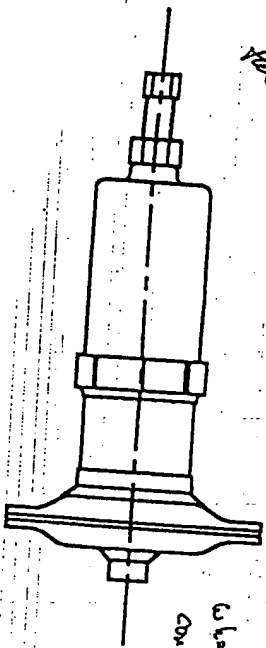


Fig 11A



2000 psi  
 15 psi  
 15 psi

is there any other  
 connections fittings?

\* SHOWN IN OPEN  
 POSITION

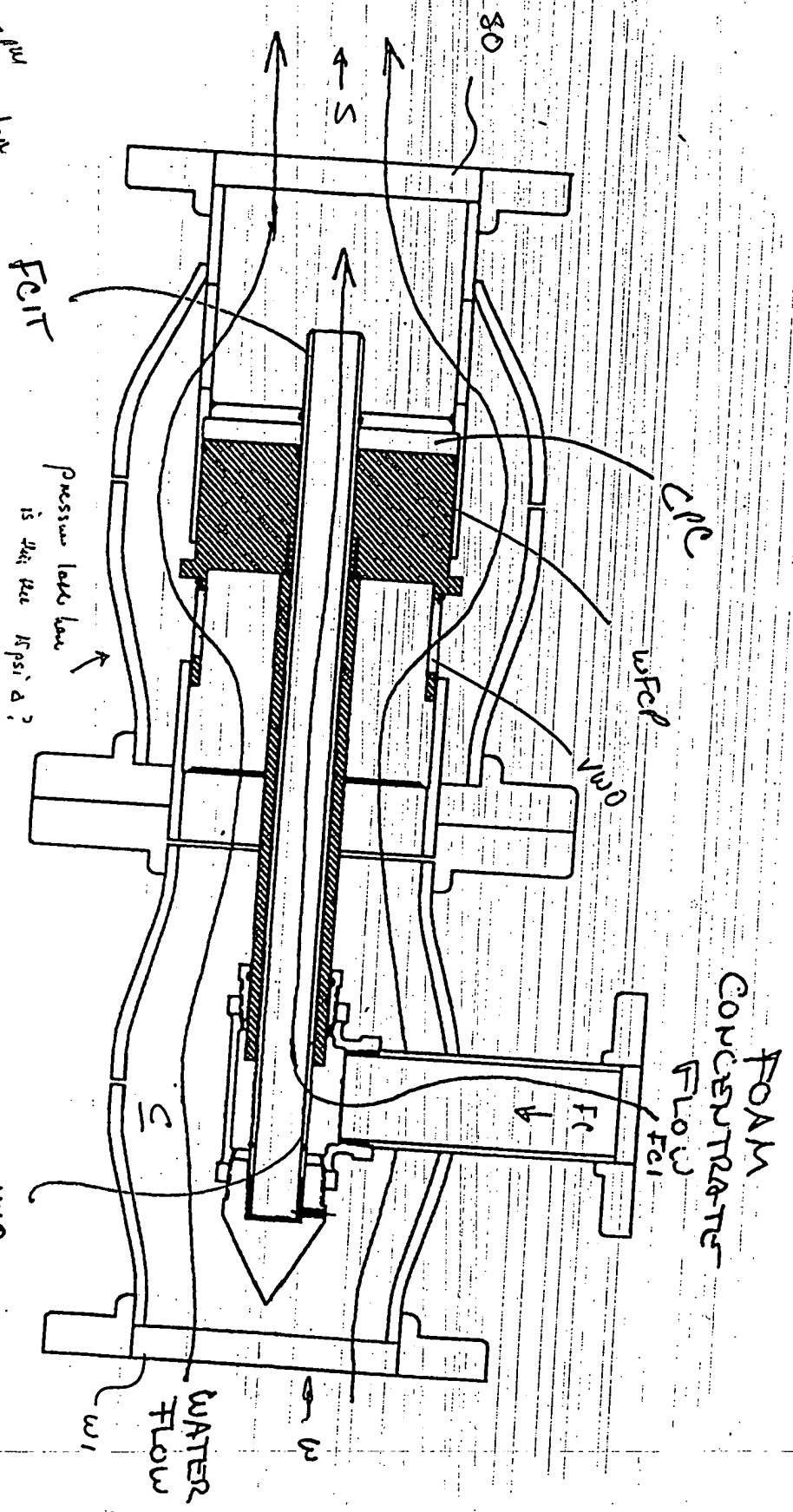


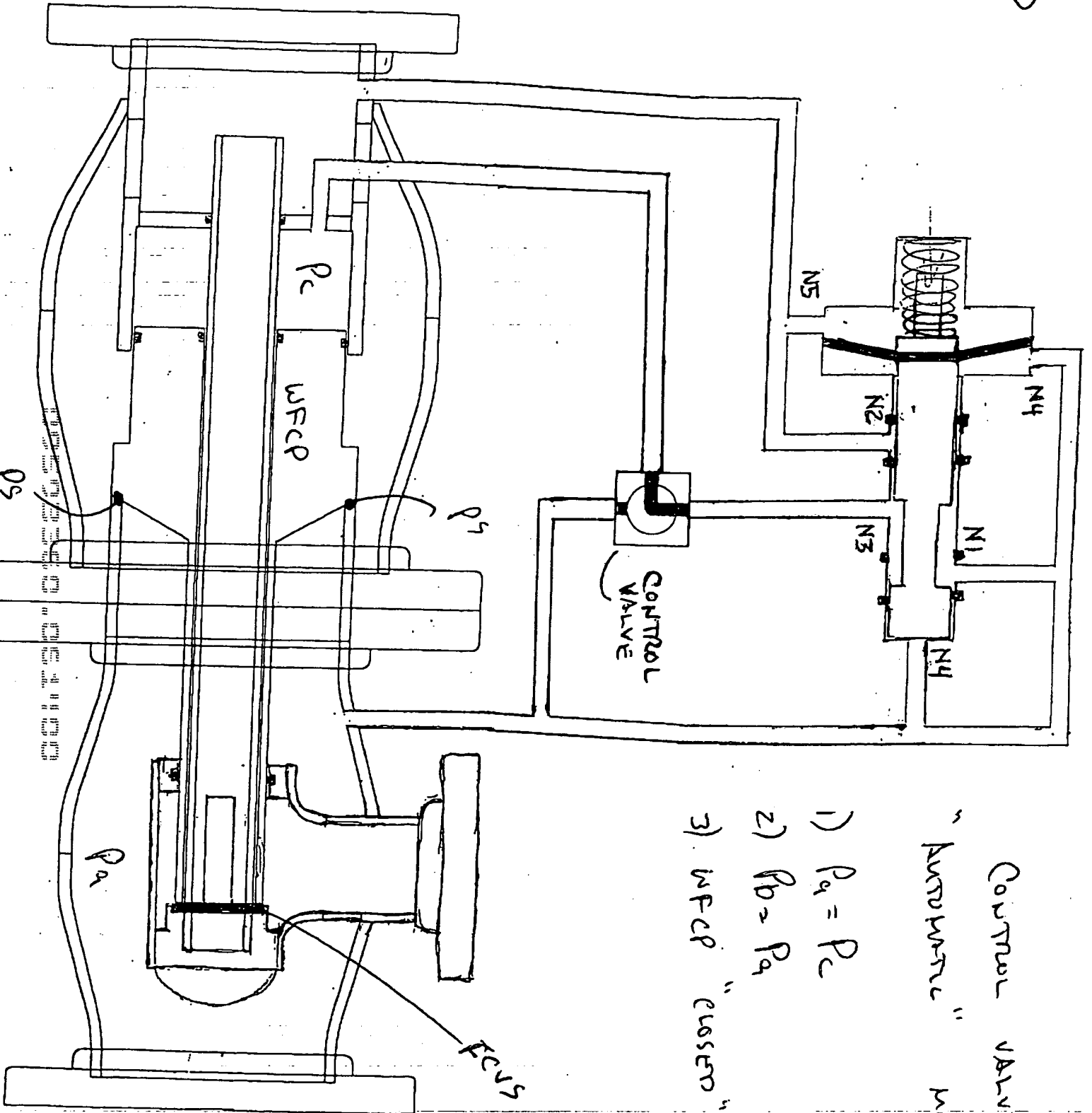
Fig 11 B

FOAM CONCENTRATE FLOW  
 WATER FLOW



Fig. 11D

Pb



CONTROL VALVE IN  
"AUTOMATIC" MODE

- 1)  $P_a = P_c$
- 2)  $P_b = P_a$
- 3) WFCP "CLOSED"

Fig. 11E

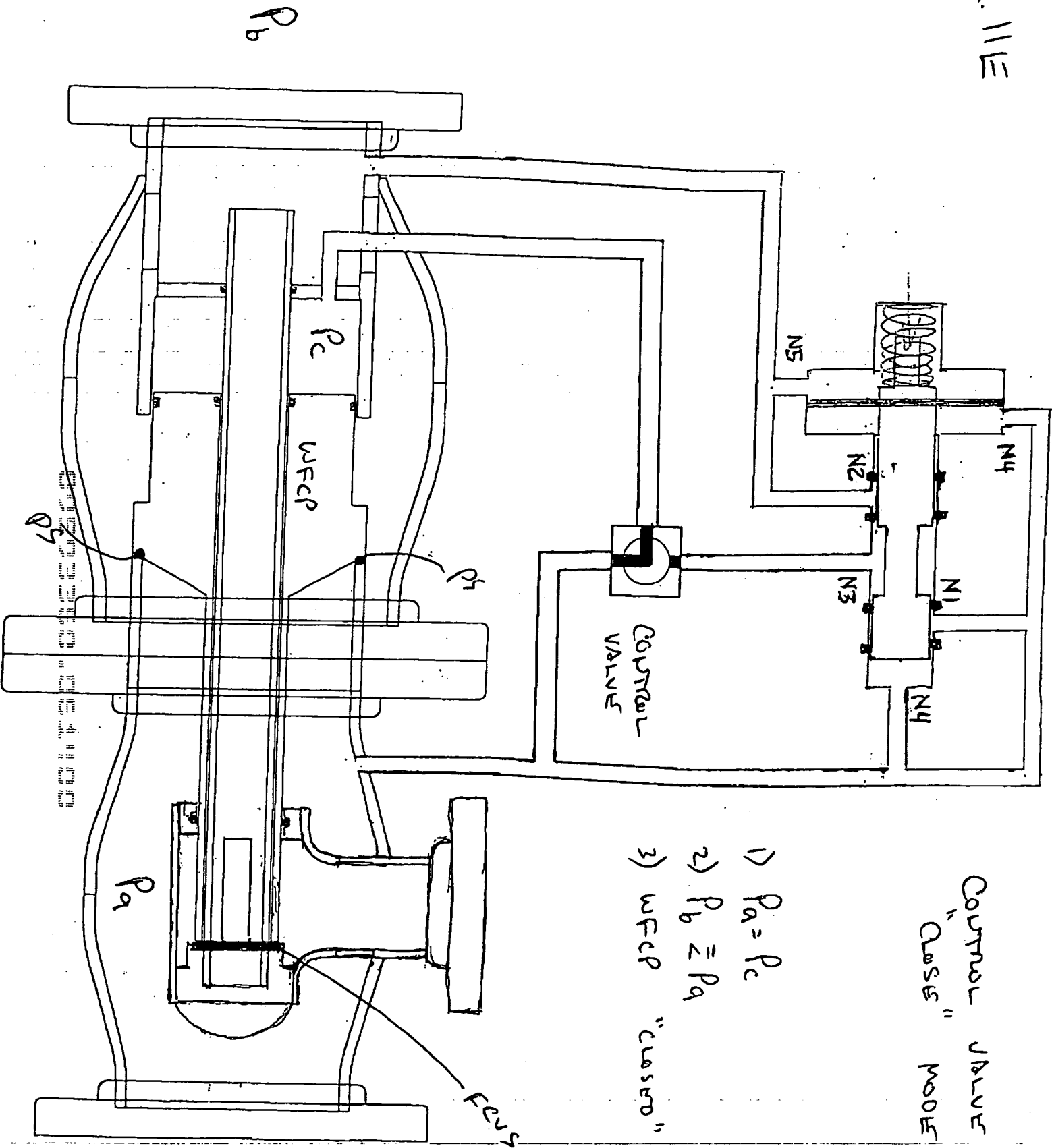
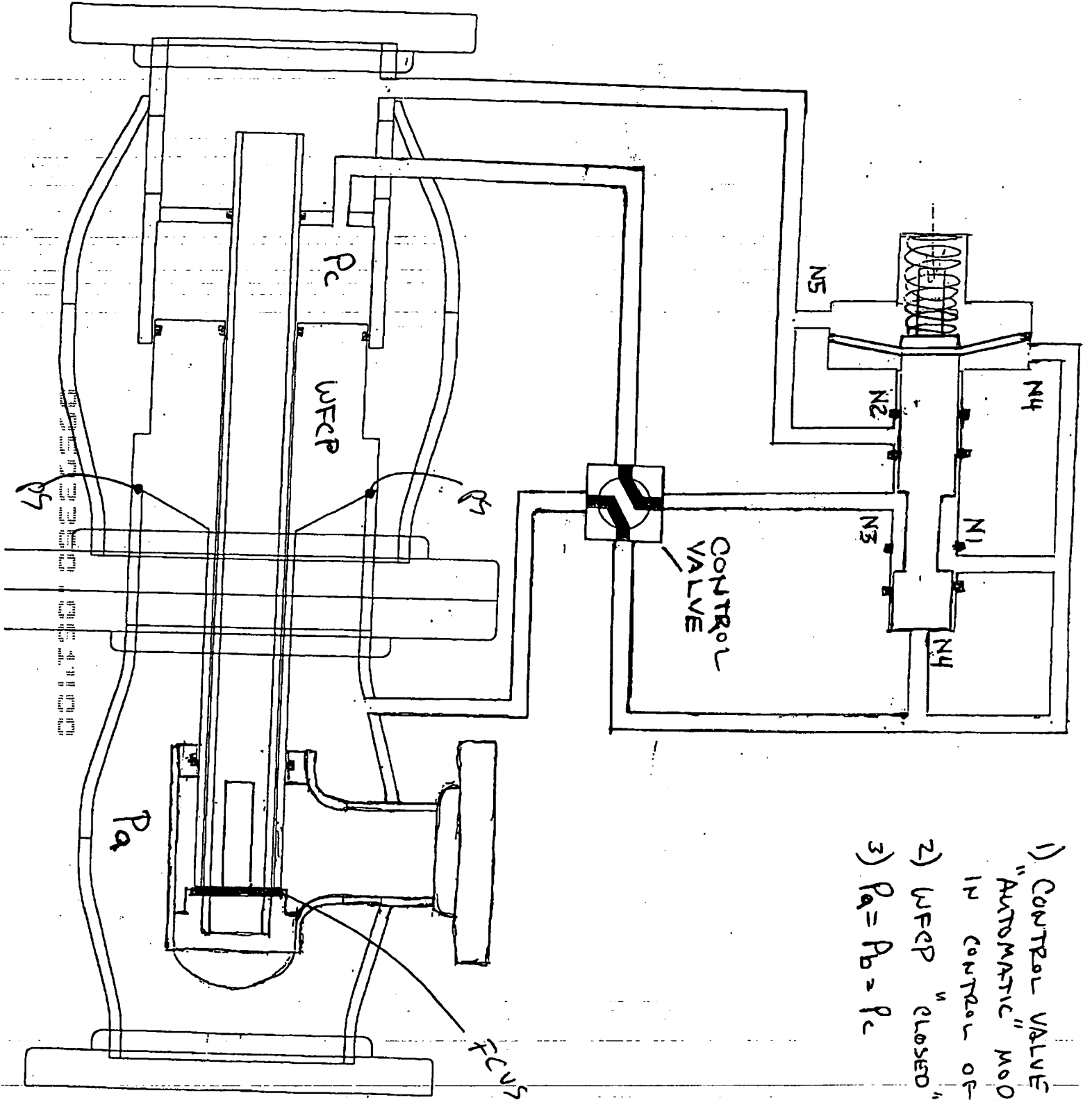


FIG. 11 F

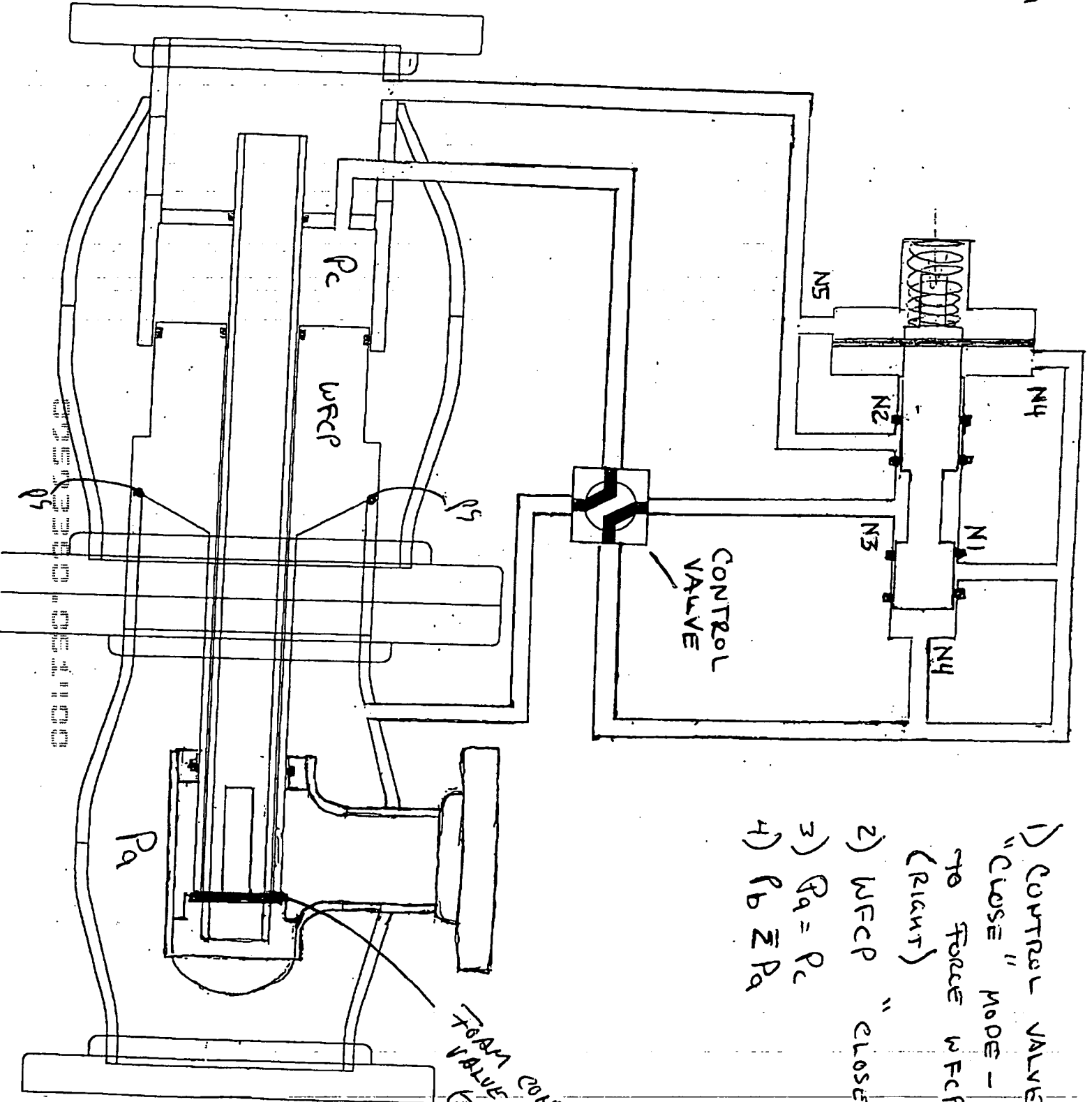
Pb



- 1) CONTROL VALVE IN "AUTOMATIC" MODE - PILOT IN CONTROL OF WFCP
- 2) WFCP "CLOSED"
- 3) Pa = Pb = Pc

FIG. 116

Pb

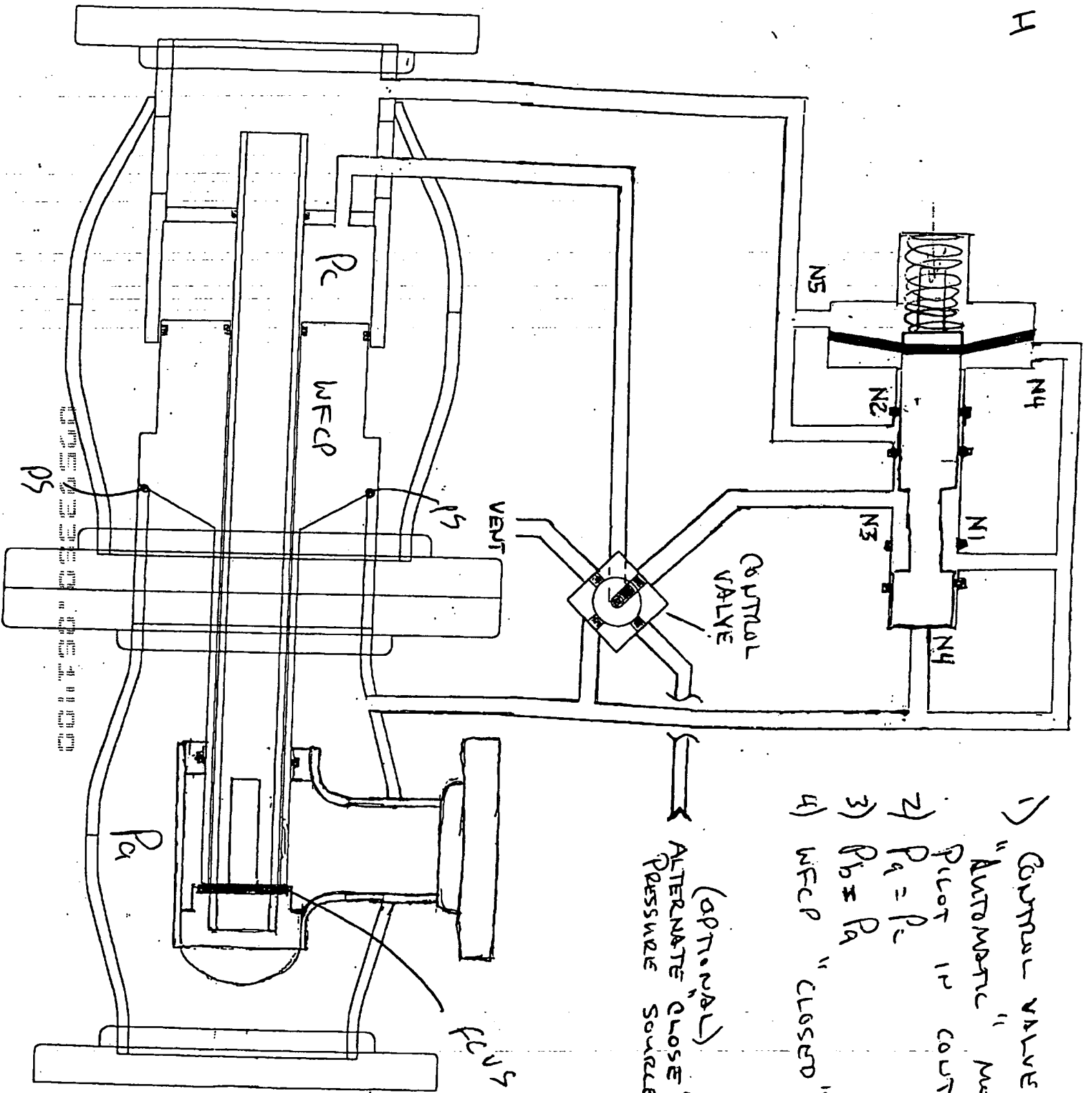


- 1) CONTROL VALVE IN "CLOSE" MODE - Pa = Pc TO FORCE WFCP CLOSED (RIGHT)
- 2) WFCP "CLOSED"
- 3) Pa = Pc
- 4) Pb = Pa

FOAM CONTROL VALVE SEAL (FCVS)

FIG. 11 H

Pb



- 1) GUTTAL VALVE IN "AUTOMATIC" MODE - PILOT IN COURSE
- 2)  $P_a = P_c$
- 3)  $P_b = P_a$
- 4) WFCP "CLOSED"

(OPTIONAL)  
 ALTERNATE PRESSURE SOURCE